

living-things

Life Cycles and the Irish Year

Lesson at a glance

Open with a robin nesting in spring, not frosty January, and take guesses about what a newborn bird needs. Settle the frog life-cycle loop on the IWB so the class sees spawn → tadpole → froglet → adult looping back. Groups then place butterfly, oak and frog stage cards onto four-season strips by arguing from what each stage needs. They capture their decisions on the Investigation Journal page, then share and predict when hedgehog young are born from needs alone.

Learning objectives

- Sequence the life-cycle stages of an Irish animal and a plant (frog, butterfly, oak)
- Link life-cycle stages to seasons in the Irish year by arguing from what each stage needs
- Explain why a life cycle is drawn as a loop rather than a straight line

Before the bell: prep

Print one set of life-cycle stage cards (frog, butterfly, oak) per group, and have one sheet of A4 per group: at the start of step 4 each group folds it into four season columns and draws two lines across for a frog row, a butterfly row and an oak row. Have Investigation Journal pages ready but do not hand them out until step 5. Cue the frog-loop interactive on the IWB.

Materials

Item	Qty	Per	Source	Low-cost substitute
life-cycle stage cards (frog spawn, tadpole, froglet, adult frog; caterpillar, chrysalis, butterfly; acorn, seedling, grown oak)	1	group	provided printable	sketch the stages on index cards
four-season strip: a sheet of A4 each group folds into four columns labelled spring, summer, autumn and winter, with two lines drawn across for a frog row, a butterfly row and an oak row	1	group	classroom	draw four columns and three rows on any sheet of paper

Safety watch-point

No hazards this lesson: card-and-discussion work only. No live minibeasts, no outdoor fieldwork, no tools.

**Teaching moves**

- **Getting Started:** Pose the robin question and take two or three guesses only. Steer gently toward food, warmth and daylight without confirming. Say: 'Living things time their lives to the seasons. Today we find out why.' Keep tone warm: no talk of eggs failing.
- **Why a Life Cycle Loops:** Board the three key words: life cycle, cycle (a loop), what a stage needs. Stress that the adult makes the next generation so the arrow loops back: head off the straight-line-that-ends-at-adult idea here.
- **Settle the Frog Loop:** Drive the four frog cards on the IWB. Model the reasoning aloud once: 'Spawn needs unfrozen pond water, so early spring, and the arrow loops because the adult lays new spawn.' Settle the frog only; butterfly and oak stay for the table work.
- **Argue Each Stage into a Season:** Cards and season strips only: no journal yet. Move between groups asking 'what does that stage need? which season supplies it?' Allow bridging cards across two columns when a stage honestly spans seasons (chrysalis, ongoing oak). Less confident groups start with the frog; stretch groups explain the chrysalis bridge.
- **Record on Your Journal Page:** Hand out journal pages now and say this is the first time decisions get written. One row per stage: stage, needs, season, short reason ('needs ... so ... season'). Each pupil chooses one life cycle and writes a row for each of its stages; early finishers add one stage from another life cycle.
- **Make Sense Together:** Ask which stage was hardest and whether any fitted more than one season. Then the hedgehog challenge: young need mild weather and plenty of insects, so late spring or summer. Accept reasoned answers. Close on the loop: the adult starts the next generation.

What it should show

Frog: spawn in early spring (unfrozen water); tadpole through spring into summer. Butterfly: caterpillar spring/early summer (soft new leaves); chrysalis may bridge or overwinter; adult summer (nectar). Oak: acorn autumn; seedling spring; adult drops acorns each autumn. Groups forcing every card into one tidy column have missed the bridging option. Invite them to slide the chrysalis across two seasons.

Misconceptions & interventions

- **Pupils think a life cycle is a straight line that ends when the animal is grown up.** Point back to the frog loop on the IWB and trace the last arrow: the adult lays new spawn, so it starts again. Ask 'where does the next generation come from?'
- **Pupils place stages by memorised calendar facts instead of arguing from need.** At the table, cover the season strip briefly and ask only 'what does this stage need to survive?' then uncover and match the season that supplies it.
- **Pupils force every stage into one neat season column, even resting or year-round stages.** Show them they may slide a card so it bridges two columns. Ask what the chrysalis is doing while it waits: resting needs less than growing does.

Differentiation

Emerging	Developing	Proficient
• Start with the frog cards already settled on the IWB so the group only has to match needs to seasons, not invent the order. • Scribe the 'needs ... so ... season' phrase on the first journal row for them to copy-structure.	• Prompt one extra 'why then?' reason aloud before they write the journal row. • Ask them to name one stage that could sit in two seasons and say why.	• Explain why the chrysalis bridges seasons rather than sitting in one, and link to the hedgehog young prediction in the make-sense talk. • Critique another group's strip: did every placement argue from need?

Cross-curricular hook

Geography: Irish seasons and weather; link card placements to why spring daylight and mild rain matter for pond and hedgerow life.